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Annual Index — 1996

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Most review headings include institution codes. An institution code, indicating the author's address as listed in the reviewed item, consists of two [or three] parts separated by hyphens (e.g., 1-MR [or F-LYON-P]); these parts designate the country, the university or institution [and the department]. The absence of a department code usually indicates Department of Mathematics. Institution codes are also used to indicate the reviewer location for some reviewers. A list of codes appears in the most recent Annual Index of Mathematical Reviews.

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PREFACE

This annual index of Mathematical Reviews (MR) is included with each subscription and is also available separately. It is also called Volume 28 of the Index of Mathematical Papers (IMP). Volumes 6–9 of IMP are the annual indexes of MR for the years 1974–77 and are available as a set. The 1978 annual index was the first to be included with each subscription. There are cumulative author indexes to MR that cover 1940–59 (Vols. 1–20), 1960–64 (Vols. 21–28) and 1965–72 (Vols. 29–44), subject indexes for 1940–58 (Vols. 1–19) and 1959–72 (Vols. 20–44), and author and subject indexes for 1973–79 (Vols. 45–58) and 1980–84.

The classification scheme used in the present index is the 1991 Mathematics Subject Classification (MSC). A copy of the 1991 MSC is printed in the back of the subject portion of this index.

The entries in the author, key and subject indexes are comprised of all items reviewed in MR during a given year and some items which will not be reviewed by MR but which have appeared in Current Mathematical Publications (CMP). A star (★) preceding a title indicates a book or other item that is reviewed as a whole. The symbol Ⓥ preceding a title indicates that the item is a videocassette.

Author index; separate key index

The entries in the author and key indexes give full bibliographic information. These entries are accompanied by review numbers {if available} and classification numbers; secondary classification numbers are given in parentheses. Entries are listed alphabetically by author; entries having several authors are listed in full under each author. Surnames consisting of more than one part (e.g., del Greco, van der Mee) are listed under the first capital letter. Collections of papers, proceedings, bibliographies, tables, etc. that are edited rather than authored are listed in the key index by title and by "key entry". For example, the publication entitled *Number theory* is listed under **Number theory** and is also listed under **Conference: Number Theory** and under the location of the conference. Some monographic series (e.g., American Mathematical Society Translations, Series 2) have entries under the series title in this index.

Arrangement of entries in the author and key indexes

For a given heading (i.e., the primary name of an author, or a title), full entries are listed in order of nominal publication dates; the cross-references are in MR number order after the full entries. The arrangement of each entry is the same as in the heading of its review in MR. The general form for entries is as follows:

Books, Monographs. (Coauthors {if necessary}) ★Title. (Language of original {if necessary}. Summary languages {if necessary}) [English translation of title {if necessary}] Miscellaneous information {edition, editors, translators, series, etc.}. Publisher, city, date. Pagination. ISBN. (Reviewer's name) Review number {if available} Primary classification (Secondary classifications {if necessary}).

Journal article. (Coauthors {if necessary} Title of article {in English translation if the original title is not in English, French or German}. (Language of original {if necessary}. Summary languages {if necessary}) [English translation of title {if necessary}] Journal abbreviation {including series number if necessary} volume number(volume number in first series {if given}) (nominal date), issue number {if necessary}, pagination (imprint date). (Reviewer's name) Review number {if available} Primary classification (Secondary classifications {if necessary}).

The first three digits of the review number of an item refer to the MR issue in which the review is published and the last five digits refer to its position within that issue. The first two digits after the colon are the general subject classification of the item.

The phrase "EA 96m" after an MR number indicates that an MR erratum or addendum to the review appears at the end of the 96m issue.

Subject index

The entries in the subject index are arranged in classification order. For a given classification, all entries with that classification as a primary appear first, with authored entries appearing before unauthored entries. These are followed by entries with that classification as a secondary. Again, authored entries appear before unauthored entries. Each section under a given classification is arranged in alphabetical order. For each entry, the author(s), title, language, translated title {if necessary} and the review number {if available} appear at the first author only. The entries for subsequent authors are cross-references to the first author. Complete bibliographic information is available in the annual author and key indexes as well as in the MR review.

Cross-references

There are four kinds of cross-references in these indexes:

Name variations. An author's preferred name is the variation of the name that MR has chosen on the basis of frequency and currency of usage. Items by a given author are usually listed under the author's preferred name. In the author index, cross-references to the preferred form are given from sufficiently distinct alternative forms of the author's name.

Authors in other capacities. In the author index, the names of persons associated with an item in a capacity other than that of author (e.g., editor, translator, subject of a biography, etc.) are also listed. In the subject index, such names appear in parentheses. In both indexes these items occur only as cross-references to complete listings.

Key entries. Cross-references for such entries as bibliographies, obituaries and references to special events are made to the authors of the papers in which these items appear, e.g. **Bibliography: Robinson, Raphael Mitchell** *see* **Henkin, Leon, 96f:01033**.

Unreviewed entries. Some entries in these indexes have not been reviewed in MR (e.g., items that do not appear to be in final form, or that are at the fringes of MR's scope) although they have been listed in CMP. Unreviewed items appear in the author, key and subject indexes in a format similar to that of reviewed items. For unreviewed items that are part of a collection, the review number in parentheses is a cross-reference to the table-of-contents review, i.e. (see 96x:xxxxx) or (96x:xxxxx). (Some such items were inadvertently omitted from the Annual Indexes for 1991–95. They are included in this index.) For unreviewed items that are not part of a collection, there is no review number cross-reference.

Transliteration

Since 1983, MR has used the Cyrillic transliteration in use by ANSI, LC, Zbl, ISI, and others. This is also the system used throughout this index. A Cyrillic transliteration table appears at the end of the author/key index.

Names of Chinese authors

The name of a Chinese author appears in the index in Western form. For example, Chen Fang Yue will be listed as Chen, Fang Yue, as though the author's name were Fang Yue Chen. The pinyin transliteration is used for mainland Chinese authors and the Wade-Giles transliteration is used for Taiwanese authors.

In an undertaking of this size, errors are inevitable, despite elaborate precautions and checks. The editors of Mathematical Reviews would be very glad to have their attention drawn to errors in this index and also in the earlier indexes.

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Aagaard, Mark (*with* Leeser, Miriam) Reasoning about pipelines with structural hazards. (English summary) *Theorem provers in circuit design* (*Bad Herrenalb*, 1994), 13–32, *Lecture Notes in Comput. Sci.*, 901, *Springer, Berlin*, 1995. (Summary) **96h:94011** 94C05 (68M15, 68Q60)

al-A'ali, M. *see* **Al-A'ali, M.**

Aaqilatu (*with* Sirendaoerji) Commutator representations for the TD-hierarchy. (Chinese. English and Chinese summaries) *Neimenggu Daxue Xuebao Ziran Kexue* **25** (1994), *no.* 4, 363–367. (Xian Guo Geng) **96c:58092** 58F07 (35Q58)

Aarão Reis, Fábio D. A. Non-universal behaviour of self-attracting walks. (English summary) *J. Phys. A* **28** (1995), *no.* 14, 3851–3862. (Summary) **96d:82031** 82B41 (82–04)

— Finite-size scaling for random walks on fractals. (English summary) *J. Phys. A* **28** (1995), *no.* 22, 6277–6287. 82C41 (82C80)

Aardal, Karen (*with* Pochet, Yves; Wolsey, Laurence A.) Capacitated facility location: valid inequalities and facets. (English summary) *Math. Oper. Res.* **20** (1995), *no.* 3, 562–582. (Štefan Peško) **96g:90056** 90C27 (90B80, 90C10)

— (*with* Pochet, Yves; Wolsey, Laurence A.) Erratum: "Capacitated facility location: valid inequalities and facets" [Math. Oper. Res. **20** (1995), no. 3, 562–582; MR 96g:90056]. *Math. Oper. Res.* **21** (1996), *no.* 1, 253–256. 90C27 (90B80, 90C10)

— (*with* van Hoesel, C. P. M.) Polyhedral techniques in combinatorial optimization. I. Theory. (English summary) *Statist. Neerlandica* **50** (1996), *no.* 1, 3–26. 90C27 (90–02)

Aarnes, Johan F. Construction of non-subadditive measures and discretization of Borel measures. (English summary) *Fund. Math.* **147** (1995), *no.* 3, 213–237. (George Bachman) **96k:28022** 28C15 (28A12)

Aarts, A. C. T. (*with* van de Ven, A. A. F.) Transient behaviour and stability points of the Poiseuille flow of a KBKZ-fluid. (English summary) *J. Engrg. Math.* **29** (1995), *no.* 4, 371–392. (Daniel Ševčovič) **96e:76005** 76A10 (45M10, 76E05)

Aarts, Erik (*with* Trautwein, Kees) Non-associative Lambek categorial grammar in polynomial time. (English summary) *Math. Logic Quart.* **41** (1995), *no.* 4, 476–484. (Summary) **96g:03067** 03D05 (03D15, 68Q50)

Aarts, Jan M. (*with* Oversteegen, Lex G.) Matchbox manifolds. (English summary) *Continua* (*Cincinnati, OH*, 1994), 3–14, *Lecture Notes in Pure and Appl. Math.*, 170, *Dekker, New York*, 1995. (Michael Sears) **96d:54034** 54H20 (54F15, 54F50, 57M99)

— Quadrics of dimension two and higher. (Dutch. Dutch summary) *Summer course* 1995: *conic sections and quadratic forms* (*Dutch*), 56–73, *CWI Syllabi*, 40, *Math. Centrum, Centrum Wisk. Inform., Amsterdam*, 1995. (H. W. Guggenheimer) **96i:51025** 51N15 (14N05, 51–01)

— (*with* Oversteegen, Lex G.) The homeomorphism group of the hairy arc. (English summary) *Compositio Math.* **96** (1995), *no.* 3, 283–292. (M. A. Owens) **96b:54056** 54F65 (30D05, 54H20, 58F23)

Aasa, Annika Precedences in specifications and implementations of programming languages. (English summary) Selected papers of the Symposium on Programming Language Implementation and Logic Programming (PLILP '91) (Passau, 1991). *Theoret. Comput. Sci.* **142** (1995), *no.* 1, 3–26. (Summary) **96c:68016** 68N15

Aasma, Ants ★ Matrix transforms of summability and absolute summability fields of matrix methods. (Estonian summary) Dissertationes Mathematicae Universitatis Tartuensis, 7. *Tartu Ül., Tartu*, 1993. 17 *pp.* (Editors) **96h:40006** 40D09 (40C05)

— Matrix transformations of summability fields of regular perfect matrix methods. (Estonian summary) *Tartu Ül. Toimetised No.* 970 (1994), 3–12. (John A. Fridy) **96h:40005** 40D05 (40C05)

Aavatsmark, Ivar ★ Mathematische Einführung in die Thermodynamik der Gemische. (German. German summary) [Mathematical introduction to the thermodynamics of mixtures] *Akademie Verlag, Berlin*, 1995. 171 *pp. ISBN* 3-05-501662-9 (Publisher's description) **96a:80004** 80A15

Abad, Alberto (*with* Belizón, Fernando) Potential of attraction for an elliptic ring. *Mech. Res. Comm.* **23** (1996), *no.* 2, 111–116. (From the introduction) **96m:70013** 70F15

vázquez-Abad, Felisa J. *see* **Vázquez-Abad, Felisa J.**

Abad, J. (*with* Rios, Miguel) Integrable spin chains associated with $\widehat{\mathrm{sl}_q(n)}$ and $\widehat{\mathrm{sl}_{p,q}(n)}$. (English summary) *J. Phys. A* **28** (1995), *no.* 12, 3319–3328. (Rodolfo Cuerno) **96g:81111** 81R50 (17B37, 82B20, 82B23)

— (*with* Rios, Miguel) Non-diagonal solutions to reflection equations in su(n) spin chains. (English summary) *Phys. Lett. B* **352** (1995), *no.* 1-2, 92–95. (Rodolfo Cuerno) **96i:82039** 82B23 (17B37, 81R50, 82B20)

Abad, M. (*with* Monteiro, Luiz F. T.; Savini, S.; Sewald, J.) Subalgebras of a finite three-valued Łukasiewicz algebra. (English summary) *Proceedings of the IX Latin American Symposium on Mathematical Logic, Part 1* (*Bahia Blanca*, 1992), 181–190, *Notas Lógica Mat.*, 38, *Univ. Nac. del Sur, Bahia Blanca*, 1993. (Summary) **96c:03116** 03G20 (06D30)

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Abadie, Beatriz Generalized fixed-point algebras of certain actions on crossed products. (English summary) *Pacific J. Math.* **171** (1995), *no.* 1, 1–21. (Andrzej Sitarz) **96m:46121** 46L55 (22D25, 46L80)

Abadir, Karim M. A new test for nonstationarity against the stable alternative. (English summary) *Econometric Theory* **11** (1995), *no.* 1, 81–104. (Summary) **96f:62143** 62M10 (62P20)

Abakumov, E. V. The inverse spectral problem for Hankel operators of finite rank. (Russian. English and Russian summaries) *Zap. Nauchn. Sem. S.-Peterburg. Otdel. Mat. Inst. Steklov.* (*POMI*) **217** (1994), *Issled. po Lineĭn. Oper. i Teor. Funktsiĭ.* 22, 5–15, 218. (Sergei Treil) **96b:47026** 47B35

— Cyclicity and approximation by lacunary power series. *Michigan Math. J.* **42** (1995), *no.* 2, 277–299. (Paul Bourdon) **96f:47056** 47B37 (30B10, 41A58, 46E99, 47A15)

Abakumov, Yu. G. (*with* Banin, V. G.) ★ Аппроксимативные свойства некоторых классов линейных операторов. (Russian. Russian summary) [Approximation properties of some classes of linear operators] *Chitinskiĭ Gosudarstvennyĭ Pedagogicheskiĭ Institut, Chita*, 1993. 62 *pp. ISBN* 5-7623-0768-9 (Asen L. Dontchev) **96a:41030** 41A36 (47A58)

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Abalakin, I. V. (*with* Chetverushkin, B. N.) The flow form of boundary conditions for kinetically consistent difference schemes. (Russian. English and Russian summaries) *Ross. Akad. Nauk Vsesoyuz. Tsentr Mat. Model. Preprint* **1992,** *no.* 28, 12 *pp.* 76M20 (65M06)

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